

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
Species of Greatest Conservation Need

fin whale

Balaenoptera physalus

MAMMALIA
Marine Mammals



Distribution & Abundance

Fin whales, *Balaenoptera physalus*, are widely distributed in the world's oceans, being found in the Atlantic, Pacific, and Southern Hemisphere. The fin whale has been listed as "endangered" under the Endangered Species Act (ESA) since its passage in 1973. Although most populations were depleted by modern whaling in the mid-twentieth century, there are tens of thousands of fin whales worldwide. Commercial whaling for this species ended in the North Atlantic in 1987. The fin whale has an extensive distribution in the North Atlantic, occurring from the Gulf of Mexico (Jefferson and Schiro 1997) and Mediterranean Sea, northward to the edges of the arctic pack ice (Jonsgård 1966a, 1966b; Sergeant 1977; IWC 1992a). Although fin whales are certainly migratory, moving seasonally into and out of high-latitude feeding areas, the overall migration pattern is confusing and likely complex (Christensen et al. 1992a). Off the eastern United States fin whales are centered along the 100-m isobath but with sightings well spread out over shallower and deeper water, including submarine canyons along the shelf break (Kenney and Winn 1987; Hain et al. 1992).

- Habitat Community: Marine, Type: Marine

Status

CITES: I, IUCN Rank: EN, FEDSTAT: FE, FED: NOAA, STSTAT: SE, SRANK: SNRN, GRANK: G3G4. STATE: FE (BK), RSGCN: L-VH, K & V: common-1B (BK), CODES: M, PELAG: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Shipping lanes; Mortality from ship collisions

- Actions:
- *Policies and regulations; At the federal and international level to reduce collisions, managing ship speeds and routing*
 - *Species recovery; Federal recovery plan in place that state should cooperate in recovery activities.*

Threat 2 - Fishing and harvesting aquatic resources; Incidental bycatch

- Actions:
- *Policies and regulations; Federal and state level regulations to reduce bycatch related to fixed gear fisheries*

Threat 3 - Human intrusions and disturbance; Anthropogenic noise in the water

- Actions:
- *Policies and regulations; At the federal and international level work to reduce noise pollution in water*
 - *Data collection and analysis; Research to fill in information needs about noise effects; Important to provide guidance on timing of work in offshore waters (e.g. installation of wind turbines)*

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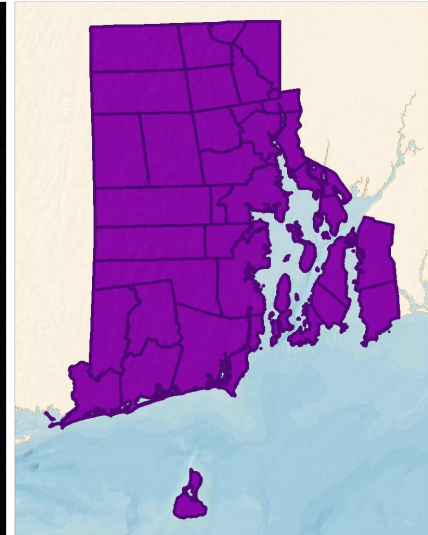
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big brown bat

Eptesicus fuscus

MAMMALIA

Bats



Distribution & Abundance

The big brown bat is a year-round resident that is currently widespread and relatively abundant in Rhode Island. Occurs in rural as well as urban and suburban areas of the state and on the larger islands of Narragansett Bay. These bats can be found in a variety of habitat types including urban areas. During spring and summer females congregate together to form maternal colonies, often in man-made structures such as barns and attics of houses to give birth and raise their young. These colonies can consist of just a few individuals or in some cases hundreds of female bats. During this time adult male big brown bats roost singly or in small bachelor colonies, also often in man-made structures. During the winter, big brown bats will use man-made structures in which to hibernate. Big brown bats utilize forest roads and forest clearings as well as fields, athletic fields, and water bodies such as ponds, streams and rivers over which to feed on a variety of insects such as moths and beetles.

- Habitat Community: barns and other man made structures

Status

SRANK: S5, GRANK: G5. RSGCN: L-H,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Currently common and widespread, but because other species are so threatened, need to continue monitoring species. Subject to white nose, but different lifestyle and behaviors make less susceptible to threat from white nose.

Actions: • *Data collection and analysis; Continued monitoring of species abundance*

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

Actions: • *Species management; Bat box construction.*

Threat 3 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

Actions: • *Data collection and analysis; Impacts must be evaluated to understand extent of threat*

Threat 4 - Agriculture and aquaculture; Widespread pesticide use on crops potentially reduces prey source for bats

Actions: • *Data collection and analysis; Impacts must be evaluated to understand extent of threat*

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Species of Greatest Conservation Need

North Atlantic right whale

Eubalaena glacialis

MAMMALIA
Marine Mammals



Distribution & Abundance

Although all right whales have been protected from commercial whaling since the first International Convention for the Regulation of Whaling was ratified in 1935, whaling had reduced the numbers in the North Atlantic to very low levels, and this species is among the most imperiled mammals in the world. The current worldwide population is believed to be at least 500 animals, and does appear to be growing slowly. NARWs have occurred off Rhode Island in all seasons of the year. They are most common in spring, less common in winter and summer, and relatively scarce in fall. Animals in this region are mainly migrating between winter calving grounds in the southeastern US and feeding grounds in and around the Gulf of Maine. Howard Winn (a URI Graduate School of Oceanography professor who died in 1995, and my Ph.D. advisor) hypothesized that the southbound migration in fall was more diffuse and farther offshore than the spring migration. It appears that northward migrating right whales in late winter and spring travel along shore until reaching Cape Hatteras, North Carolina, after which they spread out more, with some continuing to follow the coast while others take a more direct route towards Massachusetts. NARWs off Rhode Island seem to show that pattern, with the majority relatively close to shore, but others more offshore and maybe on a migratory pathway between Cape Hatteras and the Great South Channel.

- Habitat Community: Marine, Type: Marine

Status

CITES: I, IUCN Rank: EN, FEDSTAT: FE, FED: NOAA, STSTAT: SE, SRANK: SU, GRANK: G1. STATE: FE (BK), RSGCN: L-VH, K & V: common- 1A (BK), CODES: M, PELAG: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Shipping lanes; Mortality from ship collisions

- Actions:
- Policies and regulations; At the federal and international level to reduce collisions, managing ship speeds and routing
 - Species recovery; Federal recovery plan in place that state should cooperate in recovery activities

Threat 2 - Fishing and harvesting aquatic resources; Incidental by catch

- Actions:
- Policies and regulations; Federal and state level regulations to reduce by catch related to fixed gear fisheries

Threat 3 - Human intrusions and disturbance; Anthropogenic noise in the water

- Actions:
- Policies and regulations; At the federal and international level work to reduce noise pollution in water
 - Data collection and analysis; Research to fill in information needs about noise effects;

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Important to provide guidance on timing of work in offshore waters (e.g. installation of wind turbines)

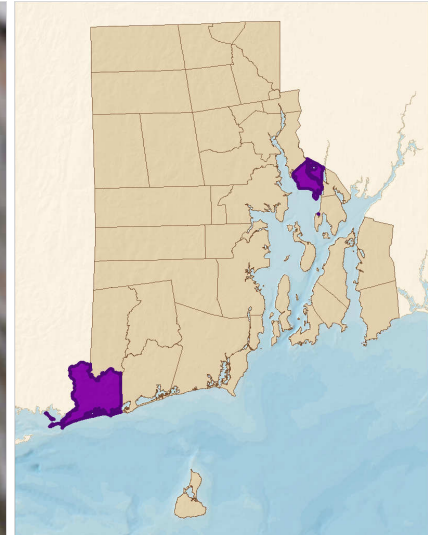
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silver-haired bat

MAMMALIA

Bats

Lasionycteris noctivagans



Distribution & Abundance

Uncommon or not present in Rhode Island during the summer breeding season. During fall and early spring migrants are present. Some individuals are known to overwinter in Rhode Island, utilizing man-made structures as evidenced by specimens submitted to the state Department of Health Rabies Lab. Little is known about distribution or habitat use in Rhode Island during the summer. Silver-haired bats roost singly in trees, often in tree cavities or under loose bark. Known to occur in a variety of forest types foraging along forest roads and often over ponds and water courses.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, SRANK: SU, GRANK: G5. RSGCN: L-VH, NABats: 1, CODES: M, MIG: 1, GRP: 9, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Renewable energy; Threatened by wind turbine development

- Actions:
- *Policies and regulations; Work to regulate cut-in speeds and placement at all levels*
 - *Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites*

Threat 2 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- *Data collection and analysis; Impacts must be evaluated to understand extent of threat*

Threat 3 - Agriculture and aquaculture; Widespread pesticide use on crops potentially reduces prey source for bats

- Actions:
- *Data collection and analysis; Impacts must be evaluated to understand extent of threat*

Threat 4 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- *Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula*

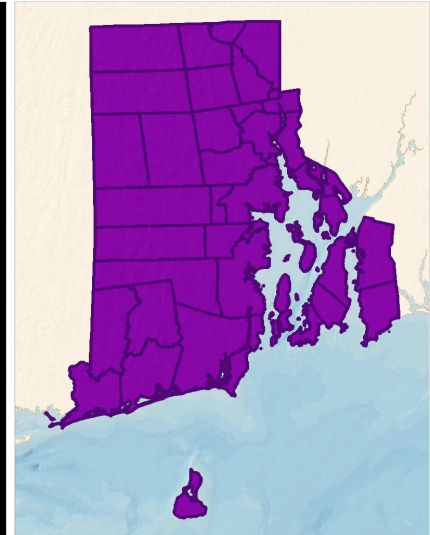
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Eastern red bat

Lasiurus borealis

MAMMALIA

Bats



Distribution & Abundance

Currently widespread in Rhode Island, occurring in a variety of forested habitats. Spring/summer resident and breeding population. Fall population includes migrants. Migrates south during fall though some individuals may overwinter in Rhode Island. As with other migratory species of bats and birds, wind turbine development may pose significant risks during migration. During the day red bats roost in the canopy of deciduous trees. They are solitary animals with the exception of a mother with young or during mating or migration. They utilize forest roads and openings in the forest as well as various water bodies such as ponds and streams for foraging for insects.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, SRANK: S?, GRANK: G5. RSGCN: L-VH, NALCC: X (B), NABats: 1, CODES: B?, MIG: 1, GRP: 10, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Renewable energy; Threatened by wind turbine development

- Actions:
- Policies and regulations; Work to regulate cut-in speeds and placement at all levels
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 3 - Agriculture and aquaculture; Widespread pesticide use on crops potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
Species of Greatest Conservation Need

hoary bat

MAMMALIA

Bats

Lasiurus cinereus



Distribution & Abundance

Uncommon in Rhode Island during the summer breeding season. During fall and early spring migrants are present. Little is known about distribution or habitat use in Rhode Island during the summer. Occurs in a variety of forest types. During the day hoary bats roost in the canopy of deciduous trees. They are solitary animals with the exception of a mother with young or during mating or migration. They utilize forest roads and openings in the forest as well as various water bodies such as ponds and streams for foraging for insects.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, SRANK: S1, GRANK: G5. RSGCN: L-VH, NABats: 1, CODES: M, MIG: 1, GRP: 11, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Renewable energy; Threatened by wind turbine development

- Actions:
- Policies and regulations; Work to regulate cut-in speeds and placement at all levels
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 3 - Agriculture and aquaculture; Widespread pesticide use on crops potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
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bobcat

Lynx rufus

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

Found in appropriate habitat in Providence, Kent, Washington Counties and mainland portions of Newport County (Tiverton and Little Compton), but does not occur on the islands of Narragansett Bay or Block Island. Bobcats are adaptable and will utilize a variety and mix of habitat types. They use swamps, forest edges, and agricultural areas for hunting small mammals and birds, rocky ledges and outcroppings for resting and den sites.

Status

CITES: II, IUCN Rank: LC, STSTAT: ST, SRANK: SU, GRANK: G5, RSGCN: L-H, CODES: RES, Res/B: 1, GRP: 7, PRIOR: 1,
- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Residential and commercial development; Fragmentation of habitat. habitat loss and human population shift from urban to rural areas, presence of people

- Actions:
- Awareness and communications; Increase public awareness about bobcats to increase tolerance of the species
 - Site/area protection; Protect important aspects of habitat (rocky outcrops for dening sites, manage for early successional habitat as needed)
 - Data collection and analysis; From 2005 SWAP need to continue to gather information and identify priority habitats

Threat 2 - Invasive non-native/alien species; Habitat loss and demographic changes from invasive species (vegetative and animal)

- Actions:
- Research, survey, inventory, monitor populations; Research invasive species management and monitoring protocols
 - Research, survey, inventory, monitor populations; Identify potential damaging exotic plants
 - Education and awareness; Develop and provide educational information about invasive species
 - Alliance and partnership development; Coordinate invasive species management with other state and regional programs
 - Planning; Create and implement invasive species monitoring protocol and management program

Threat 3 - Transportation and service corridors; Habitat fragmentation from road effects

- Actions:
- Data collection and analysis; Identify areas of significant road effects in focal areas
 - Law and policy; Conduct road mitigations where required
 - Research, survey, inventory, monitor populations

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Species of Greatest Conservation Need

humpback whale

Megaptera novaeangliae

MAMMALIA
Marine Mammals



Distribution & Abundance

- Habitat Community: Marine, Type: Marine

Status

CITES: I, IUCN Rank: LC, FEDSTAT: FE, FED: NOAA, STSTAT: SE, SRANK: SNRN, GRANK: G3. STATE: FE (BK), RSGCN: L-VH, K & V: common- 1B (BK), CODES: M, PELAG: 1,

- Climate Change Vulnerability: unknown (unknown (BK))

Threats and Actions

Threat 1 - Shipping lanes; Mortality from ship collisions

- Actions:
- *Policies and regulations; At the federal and international level to reduce collisions, managing ship speeds and routing*
 - *Species recovery; Federal recovery plan in place that state should cooperate in recovery activities*

Threat 2 - Fishing and harvesting aquatic resources; Incidental by catch

- Actions:
- *Policies and regulations; Federal and state level regulations to reduce by catch related to fixed gear fisheries*

Threat 3 - Human intrusions and disturbance; Anthropogenic noise in the water

- Actions:
- *Policies and regulations; At the federal and international level work to reduce noise pollution in water*
 - *Data collection and analysis; Research to fill in information needs about noise effects; Important to provide guidance on timing of work in offshore waters (e.g. installation of wind turbines)*

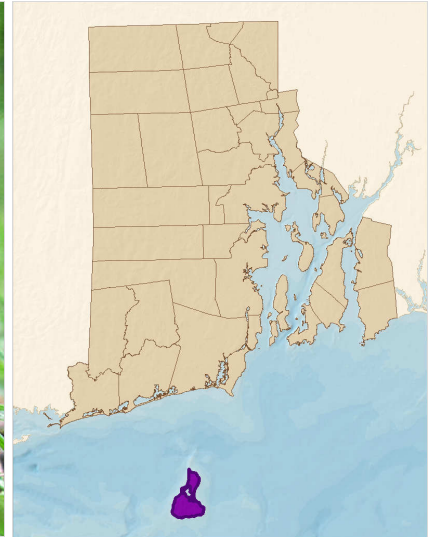
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Block Island meadow vole

Microtus pennsylvanicus proreus

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

This sub-species is indigenous to New Shoreham (Block Island). The Block Island meadow vole occupies old fields, wet meadows, pastures, and shrublands.

- Habitat Community: Ruderal Grassland/Shrubland, Type: Old Field

Status

SRANK: S2, GRANK: G5T2Q, RSGCN: H-Li, CODES: RES, Res/B: 1, FORM: 1, GRP: 8, PRIOR: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Natural system modifications; Succession of early successional habitats on which the meadow vole is dependant

- Actions:
- *Habitat and natural process restoration; Management for early successional habitat*
 - *Awareness and communications; May also include working with landowners on Block Island to modify their policies on land management. Specifically to manage early successional habitats (also cross utility for burying beetles)*

Threat 2 - Invasive non-native/alien species; Predation by domestic and feral cats

- Actions:
- *Awareness and communications; Work with public and educate about threats posed by outdoor cats*
 - *Species management; Feral cat trapping, and removal. Increase capacity of neuter and spay programs (free clinics, or funding for town programs)*
 - *Policies and regulations; Encourage local policies to control or manage feral cats*

Threat 3 - Transportation and service corridors; Habitat fragmentation from road effects

- Actions:
- *Data collection and analysis; Identify areas of significant road effects in focal areas*

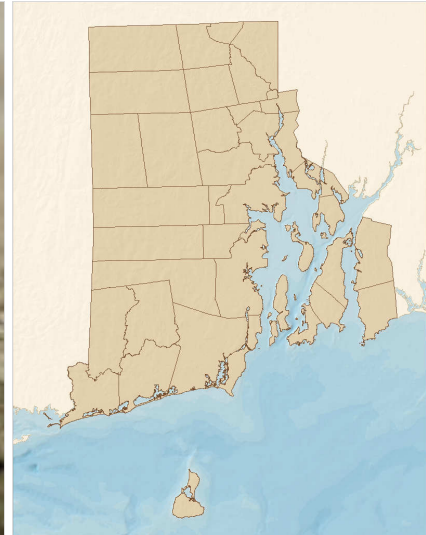
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Species of Greatest Conservation Need

Eastern small-footed myotis

MAMMALIA

Bats

Myotis leibii



Distribution & Abundance

Currently unknown in Rhode Island. No specimen records exist for the state but this species is known to occur in neighboring states and is suspected to occur in the state. Little is known about the habitat requirements for this rarely encountered species. The Eastern small-footed bat is known to require exposed rock habitats roosting in rock crevices, under rocks in talus slopes and under tree bark. They apparently use adjacent forested habitats for foraging. They hibernate in caves and mines.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, SRANK: SP, GRANK: G3. RSGCN: H-VH, NABats: 1, CODES: H, HYPO: 1, GRP: 13, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduced disease, fungal white nose syndrome

- Actions:
- Awareness and communications; Build awareness to reduce supplemental impacts to bat populations. Summer resident species, increase tolerance of the species by the public
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

- Actions:
- Species management; Bat box construction

Threat 3 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Biological resource use; Demographic changes from incidental take (human)

- Actions:
- Data collection and analysis; Evaluate permitting process for extermination permits which result in incidental take and exclusion from buildings, in order to enforce time of year restrictions and improve reporting requirements

Threat 5 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 6 - Human intrusions and disturbance; Human activities interfering with security of winter hibernation

- Actions:
- Site/area protection; Install gates and limit access to known hibernacula during the winter months.

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Species of Greatest Conservation Need

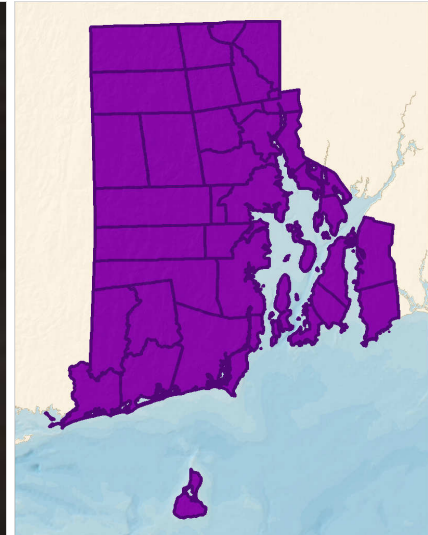
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little brown myotis

Myotis lucifugus

MAMMALIA

Bats



Distribution & Abundance

Formally common and widespread in Rhode Island prior to the introduction of White-nose syndrome. The little brown bat can still be found throughout the state although in greatly diminished numbers. Little brown bats utilize a variety of forest types during summer. During spring and summer females congregate together to form maternal colonies, often in man-made structures such as barns and attics of houses to give birth and raise their young. These colonies can consist of just a few individuals or in some cases hundreds of female bats. In the fall, little brown bats migrate to other states to hibernate in caves and mines. Several little brown bats banded at summer maternal roosts have been recaptured at hibernacula, winter quarters, in southern Vermont.

- Habitat Community: barns and other man made structures

Status

IUCN Rank: LC, SRANK: S5, GRANK: G5. RSGCN: L-VH, NALCC: X, NABats: 1, CODES: B, Res/B: 1, GRP: 12, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduced disease, fungal white nose syndrome

- Actions:
- Awareness and communications; Build awareness to reduce supplemental impacts to bat populations. Summer resident species, increase tolerance of the species by the public
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

- Actions:
- Species management; Bat box construction

Threat 3 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Biological resource use; Demographic changes from incidental take (human)

- Actions:
- Data collection and analysis; Evaluate permitting process for extermination permits which result in incidental take and exclusion from buildings, in order to enforce time of year restrictions and improve reporting requirements

Threat 5 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 6 - Human intrusions and disturbance; Human activities interfering with security of winter hibernation

- Actions:
- Site/area protection; Install gates and limit access to known hibernacula during the winter

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Species of Greatest Conservation Need

months.

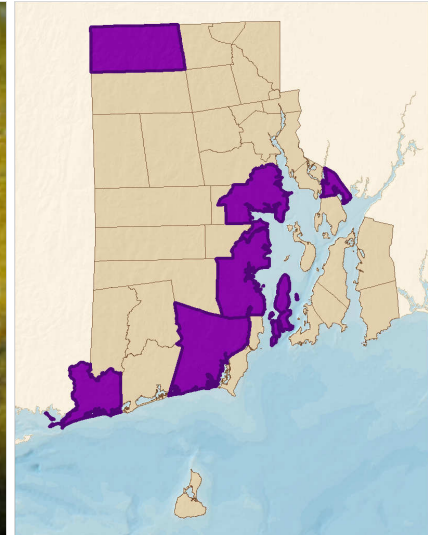
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Northern long-eared bat

MAMMALIA

Bats

Myotis septentrionalis



Distribution & Abundance

The status and distribution of this species in Rhode Island is not well understood. Prior to the impacts of White-nose syndrome this species was probably more common and widespread than it is today. Northern long-eared bats utilize a wide variety of forest types during the summer. They utilize forest roads and openings in the forest as well as various water bodies such as ponds and streams for foraging for insects and roost in tree cavities and under loose bark. Northern long-eared bats were recently discovered hibernating in small numbers in underground bunkers along the south coast.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, FEDSTAT: PE, SRANK: S2, GRANK: G4. RSGCN: L-VH, NABats: 1, CODES: M, MIG: 1, GRP: 14, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduced disease, fungal white nose syndrome

- Actions:
- Awareness and communications; Build awareness to reduce supplemental impacts to bat populations. Summer resident species, increase tolerance of the species by the public
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

- Actions:
- Species management; Bat box construction

Threat 3 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Biological resource use; Demographic changes from incidental take (human)

- Actions:
- Data collection and analysis; Evaluate permitting process for extermination permits which result in incidental take and exclusion from buildings, in order to enforce time of year restrictions and improve reporting requirements

Threat 5 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 6 - Human intrusions and disturbance; Human activities interfering with security of winter hibernation

- Actions:
- Site/area protection; Install gates and limit access to known hibernacula during the winter

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Species of Greatest Conservation Need

months.

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
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Indiana bat

MAMMALIA

Bats

Myotis sodalis



Distribution & Abundance

Not currently known to occur in Rhode Island. No specimen records exist, however historical records from Connecticut and Massachusetts suggest this species may occur in Rhode Island and may have been overlooked or not yet encountered. Indiana bats utilize upland and bottomland forests and forage along forest roads and along watercourses. They most often roost in tree cavities and under bark, the females forming small maternity colonies. They hibernate in large colonies in caves and mines.

Status

IUCN Rank: EN, FEDSTAT: FE, FED: FWS, SRANK: SNR, GRANK: G2. RSGCN: L-VH, NABats: 1, CODES: H, HYPO: 1, GRP: 15, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduced disease, fungal white nose syndrome

- Actions:*
- Awareness and communications; Build awareness to reduce supplemental impacts to bat populations. Summer resident species, increase tolerance of the species by the public
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

- Actions:*
- Species management; Bat box construction

Threat 3 - Pollution; Widespread pesticide use for insect control potentially reduces prey source for bats

- Actions:*
- Data collection and analysis; Impacts must be evaluated to understand extent of threat

Threat 4 - Biological resource use; Demographic changes from incidental take (human)

- Actions:*
- Data collection and analysis; Evaluate permitting process for extermination permits which result in incidental take and exclusion from buildings, in order to enforce time of year restrictions and improve reporting requirements

Threat 5 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:*
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 6 - Human intrusions and disturbance; Human activities interfering with security of winter hibernation

- Actions:*
- Site/area protection; Install gates and limit access to known hibernacula during the winter months.

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Species of Greatest Conservation Need

tri-colored bat

Perimyotis subflavus

MAMMALIA

Bats



Distribution & Abundance

Little is known about the status and distribution of this species in Rhode Island, as it is rarely encountered. The tri-colored bat is known to use a variety of forest habitats. Females form small maternity colonies in tree cavities and under bark and have also been known to use man-made structures. They hibernate in caves and mines.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: LC, SRANK: S4, GRANK: G5. RSGCN: L-VH, NABats: 1, CODES: B, Res/B: 1, GRP: 16, REV: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Invasive and other problematic species and genes; Introduced disease, fungal white nose syndrome

- Actions:
- Awareness and communications; Build awareness to reduce supplemental impacts to bat populations. Summer resident species, increase tolerance of the species by the public
 - Data collection and analysis; Collect more information on status and distribution to understand species needs better for summer roost sites

Threat 2 - Residential and commercial development; Habitat loss of maternal roost sites (i.e.: old barns, other man made structures)

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- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 6 - Human intrusions and disturbance; Human activities interfering with security of winter hibernation

- Actions:
- Site/area protection; Install gates and limit access to known hibernacula during the winter months.

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
Species of Greatest Conservation Need

harbor seal

Phoca vitulina

MAMMALIA
Marine Mammals



Distribution & Abundance

Of the 36 species of marine mammals sometimes found in Rhode Island's estuarine and marine waters, only the harbor seal can truly be called a resident. (Rhode Island Ocean Special Area Management Plan report). The population in New England has grown significantly since they were protected by the passage of the Marine Mammal Protection Act (MMPA) in 1972. Between 1981 and 2001, seal counts increased from 10,543 to 38,014 (6.6% per year), and pup counts increased at an even higher rate of 14.4% in New England. In 1999 the total number of harbor seal present in Narragansett Bay alone was estimated between 825 and 1,047. The population status of the seal is believed to be relatively secure and they are not listed under the U. S. Endangered Species Act or on the Rhode Island state list, and are classified as Least Concern on the IUCN Red List.

- Habitat Community: Marine, Type: Marine

Status

IUCN Rank: LC, FED: NOAA, SRANK: SNR , GRANK: G5. K & V: common-2 (BK), CODES: M, MIG: 1, PELAG: 1,

- Climate Change Vulnerability: 2100 (Habitat loss)

Threats and Actions

Threat 1 - Human intrusions and disturbance; Disturbance at haul out sites from humans in boats and kayaks

Actions: • Awareness and communications; Build public awareness of existing regulations that protect the species. (marine mammal covered by federal law therefore public not allowed to disturb species)

Threat 2 - Habitat shifting and alteration; Higher sea levels will inundate haul out sites

Actions: • Policies and regulations; International regulation of greenhouse gases
• Site/area management; Artificial haul out creation

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
Species of Greatest Conservation Need

harbor porpoise

Phocoena phocoena

MAMMALIA
Marine Mammals



Distribution & Abundance

Harbor porpoises are relatively common, are not listed under the U.S. Endangered Species Act, and are classified as Least Concern on the IUCN Red List. The total number of harbor porpoises in the North Atlantic is likely to be over 500,000, and the estimate for the Gulf of Maine/Bay of Fundy stock is around 80–90,000. Harbor porpoise occurrence in Rhode Island and nearby is strongly seasonal, with 69.5% of all records in spring, followed by winter (19.5%), summer (7.8%), and fall (2.7%). This follows what we know of the population's seasonal cycle—we see harbor porpoises most often when they are returning from farther south and offshore in the spring, heading for the Gulf of Maine. Sightings are widespread across the shelf. They probably also occur in winter in Narragansett Bay, although we have only second- and third-hand anecdotal reports for evidence. Strandings have occurred all along the south shore of Long Island, along both sides of Long Island Sound, and in parts of coastal Rhode Island. Seasonal stranding frequencies do not quite match the sighting frequencies; they are highest in winter and second-highest in spring. Winter sightings are almost surely biased low—they are hard to see to begin with (small, mainly solitary, and tending to avoid vessels), winter conditions make that even more difficult, and there are many fewer observers on the water in the winter.

- Habitat Community: Marine, Type: Marine

Status

SRANK: SNR, GRANK: G4G5. RSGCN: L-H,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Fishing and harvesting aquatic resources; Incidental by catch

Actions: • *Policies and regulations; Federal and state level regulations to reduce by catch related to fixed gear fisheries*

Threat 2 - Human intrusions and disturbance; Anthropogenic noise in the water

Actions: • *Policies and regulations; At the federal and international level work to reduce noise pollution in water*
• *Data analysis and collection; Research to fill in information needs about noise effects*

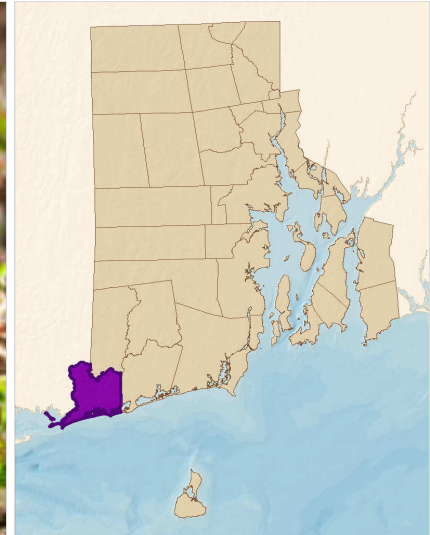
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Species of Greatest Conservation Need

Eastern mole

Scalopus aquaticus

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

The Eastern mole has a discontinuous range in southern New England, limited primarily by soil type. It has a very limited distribution in Rhode Island, known to occur only along the sandy floodplains the lower Pawcatuck River in Westerly. The first specimen record for this species in Rhode Island was collected in 2007. The Eastern mole occupies well-drained, loose sandy soils. It occurs in open fields and thin woods with appropriate soil characteristics.

- Habitat Community: Inland Sand Barren

Status

SRANK: SNR, GRANK: G5.

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Lack of information; Species at fringe of range.

Actions: • *Data collection and analysis; Need for monitoring and research of distribution and abundance*

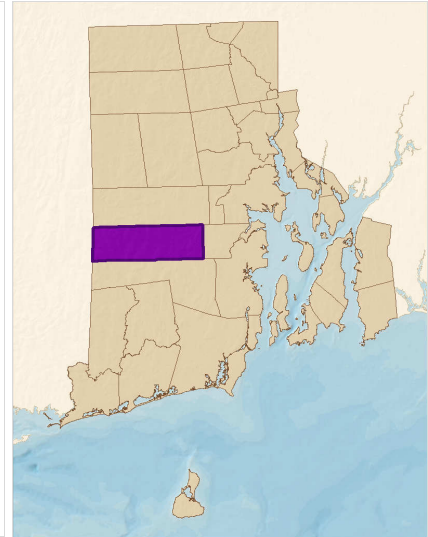
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Species of Greatest Conservation Need

smoky shrew

Sorex (Otisorex) fumeus

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

Found from New England and New York south to Georgia. Its distribution and abundance in Rhode is unknown as only a handful of specimens have been documented. Throughout its range the smoky shrew is known to occupy damp deciduous and coniferous forests.

Status

IUCN Rank: LC, STSTAT: C, SRANK: S2, GRANK: G5. RSGCN: H-M, CODES: RES, Res/B: 1, GRP: 1, PRIOR: 1,
- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Lack of information; Threats unknown, species is rare and not well understood

Actions: • *Data collection and analysis; Further survey and study. From 2005 SWAP need to continue to gather information and identify priority habitats*

Threat 2 - Invasive non-native/alien species; Habitat loss and demographic changes from invasive species (vegetative and animal)

Actions: • *Research, survey, inventory, monitor populations; identify potential damaging exotic plant management*
• *Research, survey, inventory, monitor populations; Research invasive species management and monitoring protocol*
• *Research, survey, inventory, monitor habitats; Identify priority areas for invasive plant management*
• *Education and awareness; develop and provide educational information about invasive species*
• *Alliance and partnership development; Coordinate invasive species management with other state and regional programs*

Threat 3 - Transportation and service corridors; Habitat fragmentation from road effects

Actions: • *Data collection and analysis; Identify areas of significant road effects in focal areas*
• *Law and policy; Conduct road mitigations where required*

Threat 4 - Residential and commercial development; Habitat loss from impairment of aquatic contiguity

Actions: • *Habitat and natural process restoration; Enhance habitat connectivity for priority species with culverts*

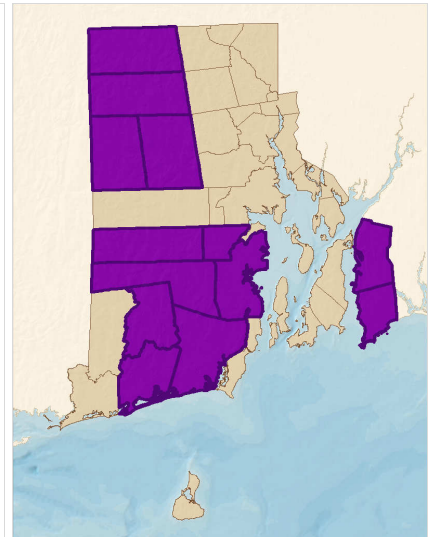
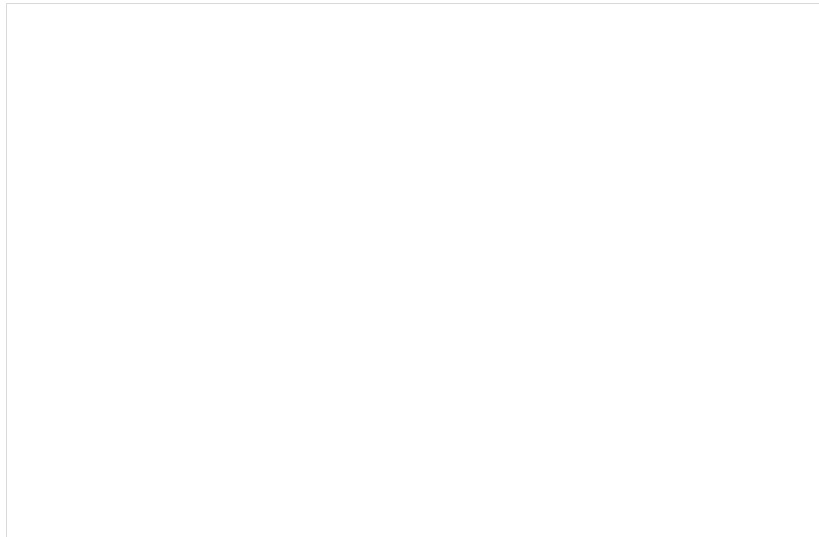
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Species of Greatest Conservation Need

American water shrew

Sorex (Otisorex) palustris

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

In Rhode Island the water shrew is found throughout mainland portions of the state where there is appropriate habitat. It does not occur on any of the islands of Narragansett Bay or Block Island or in urban or heavily suburbanized areas. This shrew species is typically found along the banks of small to medium size rocky streams, bogs and wetlands.

- Habitat Community: Forested Swamp, Type: Red Maple Swamp; Red Maple/Ash Swamp

Status

IUCN Rank: LC, STSTAT: C, SRANK: S1, GRANK: G5. RSGCN: H-H, CODES: RES, Res/B: 1, GRP: 2, PRIOR: 1,

- Climate Change Vulnerability: 2050 (Habitat loss)

Threats and Actions

Threat 1 - Dams and water management/use; Habitat modifications of hydrology of wetlands leads to loss of invertebrates that are primary food source; This could also be pollution and vegetated cover along stream corridors and impacts on riparian areas (water withdrawals for agriculture)

- Actions:*
- *Land/water protection; Protection hydrologic systems*
 - *Policies and regulations; Strict Enforcement of wetlands regulations; Regulate water withdrawals for agriculture and domestic*
 - *Data collection and analysis; From 2005 SWAP need to continue to gather information and identify priority habitats*

DRAFT Rhode Island Wildlife Action Plan Habitat Profiles
Species of Greatest Conservation Need

New England cottontail

Sylvilagus transitionalis

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

Current distribution is likely limited to only several locations in the state. The New England cottontail is found primarily in shrubby thickets, borders of swamps, and forest edges.

- Habitat Community: Mixed Oak/White Pine Forest

Status

IUCN Rank: VU, FEDSTAT: C, FED: FWS, STSTAT: C, SRANK: S2, GRANK: G4. RSGCN: H-VH, CODES: RES, Res/B: 1, GRP: 4, PRIOR: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Natural system modifications; Loss of early successional habitats through plant succession and forest conversion; Insufficient forest management activities. Insufficient availability of habitats

- Actions:
- *Habitat and natural process restoration; Creation of sufficient patches in accordance with the Regional Conservation Strategy (2012) within the focus areas containing early successional habitats; Create more patches on state owned land*
 - *Alliance and partnership development; Collaboration between forestry and wildlife and agriculture divisions of state agency to increase habitat management for wildlife*
 - *Species reintroduction; Species reintroduction must occur in cooperation with habitat management, as species not currently widely distributed*

Threat 2 - Residential and commercial development; Habitat fragmentation that decreases patch size and increases predation rates

- Actions:
- *Policies and regulations; Create thoughtful development (cluster development)*

Threat 3 - Other; Predation rates; Avian and mammalian predation due to insufficient dispersal and escape habitat for prey species

- Actions:
- *Data collection and analysis; Research and monitoring of predation rates*
 - *Resource and habitat protection; Protect areas that provide the appropriate habitats, including escape habitats*

Threat 4 - Lack of information; Numerous threats to forest structure (understory and overstory diversity and layers) and impact on this species survival (e.g. earthworm, silvicultural methods, patch size, soils)

- Actions:
- *Data collection and analysis; Research and evaluate threats to forest regeneration and the synergistic effect of multiple threats*

Threat 5 - Invasive non-native/alien species; Eastern cottontail population saturating the existing early successional habitat and maintaining high predator populations

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Species of Greatest Conservation Need

Actions: • *Species management; Control Eastern cottontail; Begin experimental Eastern cottontail removal in core areas identified for New England cottontail reintroduction and evaluate the response of the two species to management; Consider creation of a county level management zone for protection of New England cottontail (i.e. Washington County); The goal of this management zone would be to strive to create a stronghold for the New England cottontail in the state*

Threat 6 - Other; Reduced genetic diversity in existing populations

Actions: • *Species reintroduction; Captive breeding and release to augment genetic diversity of existing populations at a range-wide level, multi-state effort*

Threat 7 - Biological resource use; Demographic changes from incidental take (human)

Actions: • *Law and policy; Coordinate incidental take programs with regional and/or national initiatives*

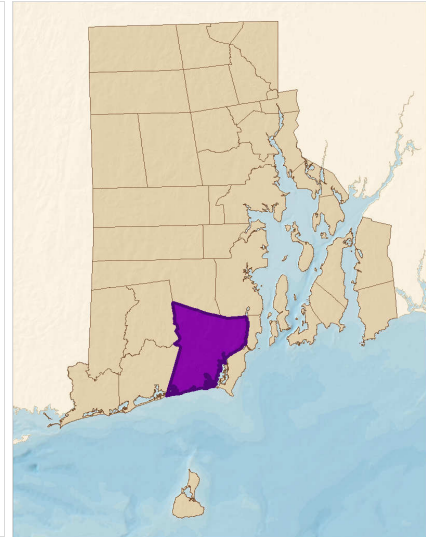
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Species of Greatest Conservation Need

southern bog lemming

Synaptomys cooperi

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

Currently, the distribution of the southern bog lemming is only known from a handful of specimen records, primarily in the Great Swamp Management Area in South Kingstown. It utilizes wet meadows, seasonally flooded areas, and shallow freshwater graminoid wetlands.

- Habitat Community: Emergent Marsh, Type: Seasonally Flooded (Shallow) Marsh

Status

IUCN Rank: LC, SRANK: S1, GRANK: G5. RSGCN: L-VH, CODES: RES, Res/B: 1, GRP: 5, PRIOR: 1,

- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Lack of information; Many threats unknown, as species is rare and not well understood

- Actions:
- *Data collection and analysis; Further survey and study; From 2005 SWAP need to continue to gather information and identify priority habitats*

Threat 2 - Invasive non-native/alien species; Habitat loss and demographic changes from invasive species (vegetative and animal)

- Actions:
- *Research, survey, inventory, monitor populations; identify potential damaging exotic plant management*
 - *Research, survey, inventory, monitor populations; Research invasive species management and monitoring protocol*
 - *Research, survey, inventory, monitor habitats; Identify priority areas for invasive plant management*
 - *Education and awareness; develop and provide educational information about invasive species*
 - *Alliance and partnership development; Coordinate invasive species management with other state and regional programs*
 - *Planning; Create and implement invasive species monitoring protocol and management program*

Threat 3 - Transportation and service corridors; Habitat fragmentation from road effects

- Actions:
- *Data collection and analysis; Identify areas of significant road effects in focal areas*
 - *Law and policy; Conduct road mitigations where required*

Threat 4 - Residential and commercial development; Habitat loss from impairment of aquatic contiguity

- Actions:
- *Habitat and natural process restoration; Enhance habitat connectivity for priority species with culverts*

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Species of Greatest Conservation Need

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Species of Greatest Conservation Need

black bear

Ursus americanus

MAMMALIA

Terrestrial Mammals



Distribution & Abundance

Black bears are widely distributed in North America. Black bears are found in all New England states with populations highest away from the human population centers along the coast. Black bears were likely extirpated from Rhode Island sometime during the 1800's. With black bear populations generally increasing in the northeast it is likely that black bears will become established in Rhode Island if they have not already done so. Black bears occupy a wide variety of forest types, but their range in the state will be limited by the availability of suitable large tracts of undeveloped land.

Status

CITES: II, IUCN Rank: LC, SRANK: SNR, GRANK: G5. CODES: RES, Res/B: 1, GRP: 3, PRIOR: 1,
- Climate Change Vulnerability: unknown

Threats and Actions

Threat 1 - Residential and commercial development; Habitat loss and human population shift from urban to rural areas, presence of people. Conflict with humans, human behaviors that attract bears and lead to conflicts- bird feeders, interactions with pets, trash, etc.

- Actions:
- Awareness and communications; Increase awareness of potential for human bear conflict
 - Land/water protection; Large contiguous habitat protected as priority habitat to decrease potential for human wildlife interaction.
 - Data collection and analysis; From 2005 SWAP need to continue to gather information and identify priority habitats

Threat 2 - Transportation and service corridors; Habitat fragmentation from road effects

- Actions:
- Data collection and analysis; Identify areas of significant road effects in focal areas
 - Law and policy; Conduct road mitigations where required

Threat 3 - Lack of planning

- Actions:
- Data collection and analysis; initiate monitoring of primary resources

Threat 4 - Residential and commercial development; Habitat loss of critical micro-features

- Actions:
- Research, survey, inventory, monitor habitats; Evaluate existing significant hibernacula

Threat 5 - Invasive and other problematic species and genes; Habitat loss and demographic changes from invasive species (vegetative and animal)

- Actions:
- Data collection and analysis; Evaluate nutritional value of exotic fruit-bearing plants

Threat 6 - Biological resource use; Demographic changes from incidental take (human)

- Actions:
- Alliance and partnership development; Coordinate incidental take programs with regional

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Species of Greatest Conservation Need

and/or national initiatives